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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,963	01/20/2004	Behrokh Khoshnevis	028080-0115	1462

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EXAMINER

DEL SOLE, JOSEPH S

ART UNIT PAPER NUMBER

1722

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/760,963

Applicant(s)

KHOSHNEVIS, BEHROKH

Examiner

Joseph S. Del Sole

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-17 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 18-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/10/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Moore, Jr (6,170,220).

Moore, Jr teaches a wall (Fig 2A, #10) having a set of spaced apart rims (Fig 2A, #20), each having a stacked set of separately-extruded layers (Fig 1); a filler (Fig 2A, C) between the rims having a stacked set of separately extruded layers (Figs 1 and 2A); the rims are made of a material different than the filler (col 3, lines 40-50); the rims are made of plastic (col 3, line 42) and the filler is made of concrete (col 3, line 9); one or more rectangular openings within the wall (Figs 1-5); one of the layers of each rim was extruded at the same time as one of the layers of the filler; and the layers of each rim that were extruded at the same time are at a level within the wall that is different than the level of the layer of the filler that was extruded at the same time.

The Examiner notes that product claims 18-23 are not further limited by limitations towards the method of which the walls are formed.

Art Unit: 1722

3. Claims 1-2 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Lopez (6,103,161).

Lopez teaches a multi-nozzle assembly having a first nozzle configured to extrude material through a first outlet (Fig 1, left most #11); a second nozzle configured to extrude material through a second outlet (Fig 1, rightmost #11); a third nozzle (Fig 1, any of middle three #s 11) configured to extrude material through a third outlet, the third outlet being between the first and second outlets; each outlet has a substantially rectangular cross-section (Fig 1); a material feed system configured to feed material to each nozzle (Fig 1, #2); the material feed system is configured to keep the material that is fed to the first and second nozzles separate from the material that is fed to the third nozzle (Fig 1); the material feed system includes a valve system configured to selectably cut off the flow of material to each of the nozzles in a controllable manner.

4. Claims 1, 3 and 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamane et al (5,059,266).

Yamane et al teach a multi-nozzle assembly having a first nozzle configured to extrude material through a first outlet (Fig 12, #116); a second nozzle configured to extrude material through a second outlet (Fig 12, #118); a third nozzle (Fig 12, #117) configured to extrude material through a third outlet, the third outlet being between the first and second outlets; a nozzle position controller configured to controllably vary the height of at least one of the outlets with respect to the height of at least one of the other outlets (Fig 12); an orientation-control mechanism configured to control the

Art Unit: 1722

orientation of the multi-nozzle assembly (Fig 12); the orientation-control mechanism is configured to control the orientation of the multi-nozzle assembly in three dimensions (Fig 12); a material feed system configured to feed material to each nozzle (Fig 12, #122, 123, 124); the material feed system is configured to keep the material that is fed to the first and second nozzles separate from the material that is fed to the third nozzle (Fig 12); the material feed system includes a valve system configured to selectably cut off the flow of material to each of the nozzles in a controllable manner (Fig 12); and further including a controllable gate configured to controllably block material extruded from at least one of the nozzles from flowing in one direction.

5. Claims 1, 2, 4, 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by King et al (4,066,723).

King et al teach a multi-nozzle assembly having a first nozzle configured to extrude material through a first outlet (Fig 2, #28); a second nozzle configured to extrude material through a second outlet (Fig 2, #24); a third nozzle (Fig 2, #26) configured to extrude material through a third outlet, the third outlet being between the first and second outlets; each outlet has a substantially rectangular cross-section (Fig 2); a first and second trowel configured to shape material extruded from the first and second nozzles, respectively (Fig 2); the width of the first and the second outlet is less than the width of the third outlet (Fig 2); a material feed system configured to feed material to each nozzle (Fig 2).

Response to Arguments

6. Applicant's arguments filed 3/25/05 have been fully considered but they are not persuasive.

The Applicant argues that the Moore document does not teach or suggest spaced apart rims comprised of a stacked set of separated-extruded layers, nor does the Moore document teach or suggest any filler between the rims and that nothing is mentioned about extrusion or an extruded layer.

The method by which the product is produced has no weight, and only limitations pertaining to the final product limit the claim. As stated above, "product claims 18-23 are not further limited by limitations towards the method of which the walls are formed."

The Applicant argues that Lopez does not teach or suggest a multi-nozzle assembly, first, second or third nozzles extruding through first second and third outlets nor the third outlet being between first and second outlets.

The Examiner disagrees for the reasons stated above in paragraph 3 of this Office action. In particular, there are multiple #s three, and despite their description as outlets they do read on individual extrusion heads as claimed.

The Applicant argues that Lopez does not teach a material feed system, but rather several storage tanks.

The Examiner disagrees because several storage tanks reads on a material feed system.

The Applicant argues that Yamane does not teach or suggest a multi-nozzle assembly that includes first, second and third nozzles configured to extrude material

Art Unit: 1722

through respective first, second and third outlets, but rather illustrates different ink jet heads which simply spray material in form of a droplet and do not extrude any material.

The Examiner disagrees. Despite the nozzles being used to deposit material, they are extruders as claimed. The differences discussed by the Applicant regarding the spraying of material, the Examiner notes that such shaping would occur by the nozzles of Yamane depending on the material used.

The Applicant argues that King lacks a multi-nozzle assembly.

The Examiner disagrees. The shaping of the material through the three openings sets forth the three openings as nozzles as claimed.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 1722

Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Benjamin Utech, can be reached at (571) 272-1137. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Joseph S Del Sole

J.S.D.
April 18, 2005